AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method of authenticating an audio-visual signal comprising

formation of a progressive signature by generating a variable number of signature bits, wherein said variable number of signature bits increases with the complexity of said audio-visual signal.

2. (Currently amended) A method according to claim 1 comprising ~~the steps of~~

splitting said audio-visual signal into blocks and

progressively decreasing the size of said blocks.

3. (Currently amended) A method according to claim 2 further comprising ~~the steps of~~

generating said signature from the contents of said blocks, whereby said number of signature bits progressively increases with decreasing block size.

4. (Cancelled)

5. (Currently amended) A method according to claim 1[[4]] further ~~characterised by the steps of~~ comprising

splitting said audio-visual signal into blocks,

merging similar blocks into regions, and

generating said signature based on said regions.

6. (Currently amended) A method according to claim 5, the ~~steps of~~ merging similar blocks into regions and generating said signature based on said regions further comprising ~~the steps of~~

calculating an image characteristics value for each of said blocks,

assigning blocks with similar image characteristics values to regions,

calculating differences between image characteristics values of said regions, and

generating said number of signature bits based on said differences between said image characteristics values of said regions.

7. (Original) A method according to claim 6, said image characteristics values being DC-values.

8. (Currently amended) A method according to claim 6 ~~further characterised in that said steps for~~ <u>wherein</u> the formation of said progressive signature ~~are~~ <u>is</u> at least once looped.

9. (Currently amended) A method according to claim 8 ~~further characterised in that~~ <u>wherein</u> the size of said blocks is decreased in each loop.

10. (Currently amended) A method according to claim 1 ~~further characterised in that~~ <u>wherein</u> the length of said signature with a variable number of signature bits is limited to a maximum signature length.

11. (Currently amended) A method according to claim 10 further comprising ~~the step of~~ embedding said signature in said audio-visual signal as a watermark, said maximum signature length being defined as the maximum payload of the watermark.

12. (Currently amended) A method according to claim 1 further comprising ~~the steps of~~ implanting said signature in said audio-visual signal and/or storing or transmitting said audio-visual signal<u>, wherein said signature is a watermark</u>.

13. (Cancelled)

14. (Currently amended) A method according to claim 1 further comprising ~~the step of~~ verifying the authenticity of said audio-visual signal by verifying said signature.

15. (Currently amended) A method according to claim 7 whereby the ~~step of~~ assigning said blocks to regions with similar DC values <u>further </u>comprises repeating ~~the steps of~~:

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picking a first block not yet assigned to a region according to a pseudo-random sequence wherein said first block becomes the first block of a new region and the DC-value of said first block becomes the DC-value of said new region, and

examining each neighbouring block of said first block whereby a further block of said neighbouring blocks is assigned to said new region and the DC-value of the new region is updated with the DC-value of the further block if the DC-value of said further block is less than a threshold,

until all blocks are assigned to a region.

16. (Currently amended) A method according to claim 7 whereby the ~~step of~~ calculating DC-differences between said regions further comprises ~~the steps of~~
arranging the DC-values of said regions in the order in which the regions are formed and calculating said DC-differences between consecutive regions for all regions.

17. (Currently amended) A method according to claim 6 whereby the ~~step of~~ splitting said audio-visual signal into blocks includes ~~is characterised by~~ said blocks being formed in a previously formed region.

18. (Currently amended) A method according to claim 7 whereby said ~~step of~~ generating signature bits based on said DC-differences includes ~~is characterised by~~ thresholding said DC-differences.

19. (Previously presented) A method according to claim 1, wherein said audio-visual signal is a digital image or frame of a digital video.

20. (Currently amended) A system for authenticating an audio-visual signal comprising a device for formation of a progressive signature generating a variable number of signature bits, wherein said variable number of signature bits increases with the complexity of said audio-visual signal.

21. (Original) A system for authenticating an audio-visual signal according to claim 20, said device for formation of a progressive signature comprising

　　　a means for splitting said audio-visual signal into blocks,

　　　a means for calculating the DC value of said blocks,

　　　a means for assigning said blocks to regions with similar DC values,

　　　a means for calculating DC-differences between said regions, and

　　　a means for generating said signature bits whereby the signature bits are based on said DC differences.

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)